K. Masui et al. U.S. Scrial No. 10/056,255 Page 12 of 15

REMARKS

Claims 1-21 are pending in the application. Claims 1, 10, 11, and 19-21 have been amended by the present amendment. The amendments are fully supported by the application as originally filed.

Claims 1, 10, 11, and 19-21 were rejected under obviousness-type double patenting as being unpatentable over claim 1 of U.S. Serial No. 10/603,719 and claim 1 of U.S. Serial No. 09/907,880. These double patenting rejections are provisional, i.e, they are based on pending applications. According to MPEP 804, since the double patenting rejections are provisional, once the prior art rejection is overcome, the double patenting rejections should be withdrawn, and the subject application should be permitted to issue as a patent (see MPEP 804, par. I, B).

In an optical pickup apparatus it is desirable to avoid attenuation in intensity of light emitted from a light source, in order to maintain signal quality for recording/reproduction. As is well known, an optical pickup apparatus can be provided with various optical elements, and the more often light passes through the optical elements, the more light intensity is attenuated. Accordingly, by minimizing the number of times light passes through the optical elements, signal quality can be maintained.

Applicants' claimed invention is directed to a holographic laser and an optical pickup for reading from and writing onto a plurality of types of optical disks having different wavelengths (see specification at page 6, first paragraph). Independent claims 1, 10, 11, and 19-21 recite a first light source for emitting a light beam L1 of a first wavelength toward an optical disk, a second light source for emitting a light beam L2 of a second wavelength toward an optical disk, a first holographic element for converging the light beam L1 separated by a wavelength separating element, and a second holographic element for converging the light beam L2 separated by the wavelength separating element. As amended, the independent claims require the second light source to be positioned near the first light source (see, e.g., specification at page 22, third paragraph).

K. Masui et al. U.S. Serial No. 10/056,255 Page 13 of 15

As amended, independent claims 1 and 19 also recite that <u>light emitted from the first light source toward the optical disk does not pass through the first holographic element, but only the return light reflected by the optical disk passes through the first holographic element. As recited in claims 1 and 19, <u>light emitted from the second light source toward the optical disk and the return light reflected by the optical disk pass through the second holographic element.</u> The second light source emits light having a long wavelength which should not be adversely affected by deterioration in signal quality due to attenuation of light intensity. Accordingly, it is possible to reduce deterioration in signal quality by the Applicants' claimed invention.</u>

As amended, independent claims 10, 11, 20, and 21 recite that <u>light emitted respectively</u> from the first and second light sources toward an optical disk does not pass through the first and second holographic elements, and only the return light reflected by the optical disk passes through the first and second holographic elements, thereby reducing the attenuation of light intensity and maintaining signal quality.

Claims 1-21 were rejected under 35 USC 102(c) as being anticipated by Japanese Publication 2000-76689 to Kamiyama (hereinaster "Kamiyama"). This rejection is respectfully traversed. It is noted that the Kamiyama reference corresponds to a Japanese patent application, and thus does not qualify as a reference under 35 USC 102(e). Section 102(e) applies only to an application by another filed in the United States and certain international applications designating the United States.

Attached for the Examiner's convenience is an English-language abstract and a computer translation of Kamiyama obtained from the Japanese Patent Office web page.

As indicated in the English-language abstract for the Kamiyama reference, with reference to FIG. 1 of Kamiyama, a first semiconductor laser 1 emits 650 nm light, and a second semiconductor laser 2 emits 780 nm light. Light from these sources is reflected by a disk 7, and the reflected light corresponding to the first semiconductor laser 1 is diffracted by a first hologram element 12 and guided to a photodetector 14, whereas the reflected light corresponding

K. Masui et al. U.S. Serial No. 10/056,255 Page 14 of 15

to the second semiconductor laser 2 is diffracted by a second hologram element 11 and guided to the photodetector 14 (see abstract).

Kamiyama does not teach or suggest an arrangement whereby <u>light emitted from the first light source toward the optical disk does not pass through the first holographic element</u> (independent claims 1 and 19), or an arrangement whereby <u>light emitted respectively from the first and second light sources does not pass through the first and second holographic elements</u> (independent claims 10, 11, 20, and 21).

In Kamiyama, any light emitted from the first and second semiconductor lasers passes through the first and second hologram elements <u>both ways</u>. In other words, Kamiyama does not restrict the passage of light through first and second holographic elements in the manner recited in the Applicants' claimed invention. Accordingly, Kamiyama is not capable of reducing the attenuation of light intensity and maintaining signal quality as provided in the Applicants' invention.

Kamiyama also does not teach or suggest a holographic laser including <u>first and second</u> light sources positioned adjacent or near each other.

For example, with reference to FIG. 11 of Kamiyama, although a photodetector is positioned between the first and second hologram elements, the first and second semiconductor lasers are not positioned near each other — in fact, the semiconductor lasers are arranged on opposite sides of the photodetector. Therefore, FIG. 11 of Kamiyama is significantly different from the Applicants' claimed invention, and does not teach or suggest the second light source positioned near the first light source, as required in claim 1.

Claim 1, e.g., further requires "the light receiving element is positioned between a focal position of 0th order diffracted light of the first holographic element and a focal position of 0th order diffracted light of the second holographic element." However, as shown in FIG. 1 of Kamiyama, the photodetector 14 is not positioned between the 0th order diffracted light of the

K. Masui et al. U.S. Scrial No. 10/056,255 Page 15 of 15

first hologram element 12 and the 0th order diffracted light of the second hologram element 11. Instead, the photodetector 14 is arranged on one side of both hologram clements.

In the Office Action, it was stated: "It is inherent that the light receiving element (14) is positioned between a focal position of 0th order diffracted light of the first holographic element (12) and a focal position of 0th order diffracted light of the second holographic element (11)..." (see page 4, middle of page).

As described in paragraph 0053 of Kamiyama (see attached translation), the relative positions of a hologram, a laser chip, and the photodetector can be "shifted in a certain tolerance zone from the design value according to the laser chip, the anchoring error of a photo detector, a package, the processing error of a stem, etc." In other words, the position of the photodetector 14 can be adjusted based on "anchoring error." It would not be inherent to completely change. the position of the photodetector 14, and thus somehow dispose the photodetector 14 between both light beams, as alleged in the Office Action.

It is believed that the claims are in condition for immediate allowance, which action is earnestly solicited.

By:

Respectfully submitted,

EDWARDS & ANGELL, LLP

Date: January 3, 2005

Steven M.Jensen

(Rcg. No. 42,693)

P.O. Box 55874 Boston, MA 02205

Phone: (617) 439-4444

Customer No. 21874